AMENDMENTS TO SPECIFICATION

Add, at the top of page 1 before "Drug application during a CT scan", the following new section title:

TITLE OF THE INVENTION

Add, on page 1 immediately preceding the current line 5, the following new section title:

BACKGROUND OF THE INVENTION

Replace the paragraph appearing on page 1, lines 11-15, with the following paragraph:

> Local application of drugs to a part of the body of a patient is well known in the field of medical practice. For example, in the case of dental surgery, the dentist may apply an anesthetic locally to that part of the mouth of the patient where the surgery is to be carried out. The local application is ~~hereby~~ thereby performed by injecting the anesthetic manually into the tissue of the patient.

Add, on page 1 immediately preceding the current line 30, the following new section title:

BRIEF DESCRIPTION OF THE INVENTION

Replace the paragraph appearing on page 2, lines 12-17, with the following paragraph:

> According to another exemplary embodiment of the present invention ~~as set forth in claim 2~~, a heart beat rate of the heart of a patient is monitored, wherein the part of the body the drugs are locally applied to is the heart of the patient. The first drug is locally applied to the heart of the patient by rupturing the first container or micro-bubble in proximity to the

heart and the rupturing of the first container is performed on the basis of the heart beat rate, resulting in a controlled change of the heart beat rate.

Replace the paragraph appearing on page 2, lines 25-32, with the following paragraph:

According to another exemplary embodiment of the present invention ~~as set forth in claim 3~~, the first container has a first resonance frequency, such that when an ultrasonic energy pulse with a first frequency corresponding to the first resonance frequency is applied to the first container, a rupture of the first container occurs and the first drug is released from the first container. The rupturing is hereby performed by means of a destruction device, wherein the destruction device generates focused ultrasound pulses, which have a first frequency corresponding to the first resonance frequency of the first container.

Replace the paragraph appearing on page 3, lines 8-16, with the following paragraph:

According to another exemplary embodiment of the present invention ~~as set forth in claim 4~~, the first container has a first resonance frequency, such that when an electro-magnetic energy beam with a first frequency corresponding to the first resonance frequency is applied to the first container, a rupture of the first container occurs and the first drug is released from the first container, wherein the rupturing of the first container is performed by means of a destruction device. The destruction device generates a beam of electro-magnetic radiation and the electro-magnetic radiation has a first frequency corresponding to the first resonance frequency of the first container.

Replace the paragraph appearing on page 3, lines 20-24, with the following paragraph:

According to another exemplary embodiment of the present invention ~~as set forth in claim 5~~, a second drug is transported in a second container, wherein the first container has a first resonance frequency and the second container has a second resonance frequency. The first resonance frequency is different from the second resonance frequency.

Replace the paragraph appearing on page 3, line 31 to page 4, line 3, with the following paragraph:

According to another exemplary embodiment of the present invention ~~as set forth in claim 6~~, the application of the first drug increases the heart beat rate and the application of the second drug decreases the heart beat rate. Therefore, by selectively destroying either the first container or the second container in the vicinity of the heart, the heart beat rate may effectively be controlled.

Replace the paragraph appearing on page 4, lines 6-12, with the following paragraph:

According to another exemplary embodiment of the present invention ~~as set forth in claim 7~~, the containers are micro-bubbles. The micro-bubbles may have a structure and materials such as, for example, disclosed in the US 2002/0151792 A1, which is hereby incorporated by reference. The micro-bubbles may contain a contrast agent, which is visible in images registered by means of a nuclear medical imaging system. The micro-bubbles may be suitable for introduction into a blood stream of a subject, such as a patient, animal or mammal.

Replace the paragraph appearing on page 4, lines 13-25, with the following paragraph:

According to another exemplary embodiment of the present invention ~~as set forth in claim 8~~, a CT scanner system is provided, which is adapted for controlling a local application of drugs to a part of the body of a patient during a CT scan, comprising a CT scanner, a monitoring device, a data processing device and a destruction device. The drugs are transported in containers suitable for introduction into a bloodstream of the patient and preventing an application of the drugs, wherein a first drug is transported in a first container. The CT scanner is adapted for acquisition of an image of the part of the body and the monitoring device is adapted for monitoring a heart beat rate of the heart of a patient during the CT scan. Furthermore, the destruction device is adapted for rupturing the first container in proximity to the part of the body, resulting in a local application of the first drug to the part of the body and the data processing device is adapted for triggering the rupturing of the first container on the basis of the heart beat rate.

Replace the paragraph appearing on page 4, line 28 to page 5, line 2, with the following paragraph:

According to another exemplary embodiment of the present invention ~~as set forth in claim 9~~, the first drug is locally applied to the heart of the patient on the basis of the heart beat rate, wherein the first container has a resonance frequency. The destruction device is adapted for generating either focused ultrasound pulses or a beam of electro-magnetic radiation. Furthermore, the frequency of the one of focused ultrasound pulses and the beam of electro-magnetic radiation corresponds to the resonance frequency of the first container.

Replace the paragraph appearing on page 5, lines 6-15, with the following paragraph:

The present invention also relates to a computer program, which may, for example, be executed on a processor. Such computer programs may be part of for example, a CT scanner system. ~~The computer programs, according to an exemplary embodiment of the present invention, are set forth in claim 10.~~ These computer programs may be preferably loaded into working memories of data processors. The data processors are thus equipped to carry out exemplary embodiments of the methods of the present invention. The computer programs may be stored on a computer readable medium, such as a CD-ROM. The computer programs may also be presented over a network such as the WorldWideWeb, and may be downloaded into the working memory of a data processor from such networks.

Replace the paragraph appearing on page 5, lines 16-18, with the following paragraph:

Another exemplary embodiment of the present invention ~~as set forth in claim 11~~ relates to the use of containers for controlling a local application of a drug to a part of the body of a patient during a CT scan.

Add, on page 5 immediately preceding the current line 30, the following new section title:

BRIEF DESCRIPTION OF THE DRAWINGS

Add, on page 6 immediately preceding the current line 16, the following new section title:

DETAILED DESCRIPTION OF THE INVENTION

Replace the paragraph appearing on page 11, line 26 to page 12, line 6, with the following paragraph:

In step S5, a measurement of the actual heart beat rate is performed, e.g. by an ECG, and in step S6 the measured heart beat rate is evaluated. By then, the injected containers have been transported to the heart of the patient by means of the bloodstream. If the data processing device which evaluates the heart beat rate observes a change in the heart beat rate, it may trigger a destruction of micro-bubbles S7 in the vicinity of the heart. The micro-bubbles may then be destroyed by means of a focused ultrasound pulse at the resonance frequency of the micro-bubbles, leading to a local delivery of the drugs. The micro-bubbles used for the transportation of the drugs must have different sizes and thus different resonance frequencies in order to allow a delivery of only one of the two drugs at a time. For example, if the data processing device observes an increase of the heart beat rate, it triggers a destruction of the second type of micro-bubbles, namely the micro-bubbles containing acetic choline, which decreases the heart beat rate.

Add, on page 14 immediately preceding claim 1, the following new paragraph:

We claim: